Erasmus School of Law

Block 3
Governance and Regulation of Digital Technology

RT08

Syllabus 2025 - 2026

Erasmus University Rotterdam
Make it happen.

Table of Contents

1. Introduction 4

2. General information 6
   - 2.1 Lecturers 6
   - 2.2 Course objectives 6
   - 2.3 Participation requirements 6
   - 2.4 Assessments and resit 6
   - 2.5 Communication 7
   - 2.6 Fraud, plagiarism, and using generative artificial intelligence (AI) 8

3. Course activities 10
   - 3.1 Course schedule 10
   - 3.2 Lectures 11
   - 3.3 Modules and reading materials 11
   - 3.4 Case study (group assignment) 14
   - 3.5 Exam 14

4. Rubrics & grading 15
   - 4.1 Written assignment (group assignment) 15
   - 4.2 Presentation (group assignment) 15
   - 4.3 Grading 16

1. Introduction

This course is about the governance and regulation of digital technology. Digital technology is a broad concept, we will not cover all digital technologies that are available or upcoming. A selection is made. Examples of digital technologies that are considered in this course are: artificial intelligence and digital tools that are used in legal professions or that have legal relevance. Similarly, we will not be able to cover all legislation that may be relevant for digital technologies, again a selection is made.

In this course, two main questions related to governance of digital technology are addressed:

1) why should digital technology be regulated? and
2) how is digital technology regulated?

Both questions are approached from an analytical perspective. This means we do not assume that it is per se needed to regulate (new) technologies with specific regulations. The questions instigate a closer look at the challenges that are presented by certain digital technologies to society and to the existing legal framework. Several sub-questions can be raised: what are the challenges that a particular digital technology causes to society? And can these challenges be adequately addressed by existing law, or is specific legislation needed?

Law can both facilitate and regulate digital technologies. When we look at how technology is regulated, the analytical perspective entails that we asses if the relevant regulation can adequately address the challenges or problems that are caused by digital technologies. Can the regulation at hand -at least theoretically- live up to its aims? And: are there any follow up questions or new problems that arise because of the technology specific laws?

Governance and regulation of digital technology takes place on several levels. Global digital governance encompasses transnational and international (soft) law, rules, norms, institutions, and standards that shape the regulation related to the development and use of digital technologies. The legal framework that is considered in this course is international and (mainly) European. This course includes both public and private law perspectives.

This course consists of 3 modules.

1) week 1 and 2 general principles of governance and regulation of emerging technologies are discussed. Of the many laws and regulations affecting digital technology, the following topics were chosen:

2) week 3 and 4: legal issues related to the development as well as the application of software are discussed, in particular, contractual issues and intellectual property rights;
3) week 4, 5 and 6: the liability framework and regulations that address the problems brought on by AI.

Several topics that are relevant for the governance of digital technologies are expressly not covered in this course, because they are addressed in other courses of the Master program, this includes: ethics, fundamental rights, the protection of personal data, the legal status of non-personal data and data-security. These issues may at times be touched upon in this course, to indicate their relevance and their place in the bigger constellation that is relevant when considering governance and regulation of technology.

2. General information

2.1 Lecturers

Prof. Dr. Klaus Heine
Dr. Shu Li
Dr. Kees van Noortwijk
Course coordinator: Dr. Martien Schaub (schaub@law.eur.nl)

2.2 Course objectives

At the end of this course, you:

Course objectives
a. will have an analytical understanding of the theory on governance and regulation of digital technologies;
b. can apply your theoretical knowledge on governance and regulation to different types of digital technology;
c. will have general knowledge of the legal framework that is relevant for AI and software tools;
d. are able to adopt an analytical attitude regarding the materials and legal framework that is taught in this course;
e. can discuss on an academic level with others concerning the subject matter of the course.

2.3 Participation requirements

To take part in this course students need to fulfill the requirements for access to the Master Rechtsgeleerdheid. In general, a Bachelor in law diploma is required.

2.4 Assessments and resit

The following assessments are administered in this course:

Assessments	Weighting
Case study (group-paper and group presentation)	40% (20%+20%)
Individual exam	60%

The group assignments and the individual exam must all be completed with a sufficient grade to pass the course. An insufficient grade for one part of the assessment cannot be compensated with another part. The final grade

(including the grades scored for the group assignments) will be communicated at the end of the course. However, in case one of the intermediary group assignments is not completed with a sufficient grade, you will be notified of this as soon as possible.

About the **case study**:
The assignment is a group assignment and is graded per group, which means that each member of the group will get the same grade. You will be assigned to a group and each group will be given a different case. Students are required to analyze a specific digital application or topic, e.g. face recognition technology, predictive policing, autonomous vehicles, etc. and answer questions such as: what are the risks? What is the relevant legal framework? What is the liability for different actors when harm occurs? Are the current and proposed regulation and liability framework sufficient to deal with the risk and harm issues?

Re-sit
If you fail one or more parts of the course, you will be given the opportunity to do a re-sit for the part that you failed.

2.5 Communication

Information about the course and study
All course-related information can be found on Canvas. All relevant information about your study can be found in the MyESL app (downloadable in the Apple App Store en Google Play Store) or on MyEUR. So keep an eye on Canvas, the MyESL app (or MyEUR) and your student email for all the information about the course and your studies.

Course-related questions
Questions can be asked during lectures and tutorials or in discussions on Canvas. We encourage students to answer each other's questions in the first place, as explaining something to someone else helps you to remember and understand the material.

Administrative questions / general questions about the study
The ESL study point can help you with all administrative questions (for instance about the schedule, your registration or grades) and general questions about your study. You can also make an appointment with a study advisor at the ESL study point. You can also do this online via https://my.eur.nl/nl/esl/afspraak-inplannen-studieadviseurs.

Location	L1.04
Opening hours	Monday to Friday from 09.30 - 16.30
Telephone	010 - 408 15 60
Email	studiepuntesl@law.eur.nl

Problems with Canvas and/or viewing video's
If you experience any problems with Canvas and/or the playback of video material, please send an e-mail to: canvas@law.eur.nl

2.6 Fraud, plagiarism, and using generative artificial intelligence (AI)

Generative Artificial Intelligence tools, such as Generative AI, have a major impact on education and assessments. In this text, we will inform you on how we deal with the use of Generative AI in our education and assessments in this course and what we expect from you.

The basic principle of Erasmus School of Law remains (in line with the EUR-policy) that you are responsible for writing and submitting your own work at all times. Verbatim copying of texts (without reference) from Generative AI is classified as fraud, but responsible use of Generative AI is allowed. Click here for more information on **fraud** and **plagiarism**.

It is recognized within Erasmus School of Law that Generative AI, such as ChatGPT and GenIA-L (in Rechtsorde), is used as a tool. For example, by using it as a search engine, as an idea generator, for summarizing texts or for providing feedback on the language and structure of your written texts. The basic principle remains that the final elaboration is self-written. Before you use a Generative AI-tool, it is important to follow the S.E.C.U.R.E.-framework.

When using Generative AI, be aware that the tools can generate unreliable and/or biased information, which is especially the case with ChatGPT and other open source AI-tools. Therefore, always be critical and only use results as input for further research. In addition, with open source tools such as ChatGPT, you give away data to the companies that developed the Generative AI tools. Note that the data may be shared as well. Everything you type or upload (personal data, security credentials and/or confidential information) is stored in their database, cannot be deleted and can be used for their own purposes. Be aware of copyright infringement as well.

When using the GenIA-L (Rechtsorde) application, be aware that it is sensitive to fraud, since this tool almost literally copies texts from the sources used. The tool often provides similar answers to different questions about the same subject as well causing fellow students to then give virtually the same answers, even if you have used different search terms.

If you use Generative AI as a source, you should treat it like other consulted sources by referring to it correctly. See below the example of a correct reference. In addition, you may be asked to share your conversation history with Generative AI. This will also indicate how you have used it.

Reference in the text:
(Author of the generative AI model, year of version used)
For example: (OpenAI, 2023) or OpenAI (2023)
In the reference list:

Author of the generative AI model used. (Year of the generative AI model used). *Name of the generative AI model used* (Version of the generative AI model used) [Type or description of the generative AI model used]. Web address of the generative AI model used.
For example: OpenAI. (2023). generative AI (April 20 version) [Large language model]. https://chat.openai.com/

3. Course activities

3.1 Course schedule

	Date	Activity and room	Topic
Lecture rooms are booked for 4 hours, but the lectures will not be that long (usually max 2 hours). In the extra time the room can be used for study or group work. Wednesday lectures start at 10:00 to allow those who have to travel from far to arrive in time. With the exception of Wednesday 11-2, when we will need the time for the presentations.			
Week 1	05-01-26 13:00-16:45	Lecture 1 Prof. Dr. Klaus Heine Sanders 0-12	Innovation policy as a government task
	07-01-26 10:00-12:45	Lecture 2 Prof. Dr. Klaus Heine Van der Goot M1-06	Innovation policy by means of law and regulation
Week 2	12-01-26 13:00-16:45	Lecture 3 Prof. Dr. Klaus Heine Van der Goot M2-11	Law and regulation of digital technologies
	14-01-26 10:00-12:45	Lecture 4 Prof. Dr. Klaus Heine Van der Goot M1-06	Battle of ideas: What have we learned from the models? Student groups try to make substantiated arguments
	14-01-26	Publication case study	
Week 3	19-01-26 13:00-16:45	Lecture 5 Dr. Kees van Noortwijk Van der Goot M2-11	Software development cycles; Standard vs. tailor-made; contracts for development, maintenance and application; Software as a Service
	21-01-26 10:00-12:45	Lecture 6 Dr. Kees van Noortwijk Van der Goot M1-06	Internet service providers; Legal protection of computer software; Copyright
Week 4	26-01-26 13:00-16:45	Lecture 7 Dr. Kees van Noortwijk Van der Goot M2-11	Copyright (continued); Open source software licenses; Patent law; Protection of databases
	28-01-26 10:00-12:45	Lecture 8 Dr. Shu Li Van der Goot M1-06	Product safety regulation in the EU
Week 5	02-02-26 13:00-16:45	Lecture 9 Dr. Shu Li Polak 2-04	The EU AI Act
	04-02-26 10:00-12:45	Lecture 10 Dr. Shu Li Van der Goot M1-06	The EU AI Act
	06-02-26 23:59	Hand in written assignment	
Week 6	09-02-26 13:00-16:45	Lecture 11 Dr. Shu Li Van der Goot M2-11	The liability for AI and new technologies
	11-02-26 9:00-12:45	Lecture 12 All lecturers Van der Goot M1-06	Case study presentations
Week 7		Exam	

3.2 Lectures

During the block, two interactive lectures will be organized each week. Attendance is compulsory. The rooms are booked for 4 hours, however, the lectures will not last that long. The lecture will usually be 2 hours maximum. During the extra time, the room will remain available for the students to prepare for lectures and work on the group assignment. The last lecture (11 February 2026) will be dedicated to the case study presentations, followed by discussions.

3.3 Modules and reading materials

The course is divided in three modules:

Module 1 (week 1-2)- Governance of new technologies (Klaus Heine)
In the first module the general principles of governance and regulation of (emerging) technologies are addressed. With the rise of digitalization, AI and Big Data the general problems of technology regulation are either amplified or new problems appear, which cannot always be solved within the incumbent framework. Questions that are addressed are: why should we regulate new technology? Why are digital technologies a challenge for the incumbent legal framework? What digital governance models can be distinguished? The general framework applies to all kinds of (digital) technologies, we will further explore and illustrate the theoretical groundwork in the context of two particular topics in the next two modules.

Legal acts and reading materials:
A good textbook for the general foundation of innovation policy is:

- Scherer, F.M.; Ross, D. (1990), Industrial Market Structure and Economic Performance, Boston. It is an older book, but a good read and accessible for non-economic students. It gives a comprehensive account of innovation and technology. However, the digital challenges are not covered as an extra subchapter.

The following literature is drawn from the original literature, which is foundational to modern regulatory policy. The mathematical analyses are not necessary for a principal understanding of the analytical argument. More literature will be given in the lecture:

- Arrow, K.J. (1962), Economic Welfare and the Allocation of Resources for Inventions, in: Nelson, R.R. (ed.), The Rate and Direction of Inventive Activity: Economic and Social Factors, Princeton, 609-626. Available on Canvas.
- Baumann, F.; Heine, K. (2013), Innovation, tort law, and competition, in: Journal of Institutional and Theoretical Economics, Vol. 169(4), 703-719. Link.

- Dosi, G. (1982), Technological paradigms and technological trajectories: A suggested interpretation of the determinants and directions of technical change, in: Research Policy, Vol. 11 (3), 147–162. Link.
- Loury, G.C. (1979), Market Structure and Innovation, in: Quarterly Journal of Economics, Vol. 93(3), 395–410. Link.
- Mehra, S.K. (2016), Antitrust and the Robo-seller: Competition in the Time of Algorithms, in: Minnesota Law Review, Vol. 100, 1323-1375. Link.
- Petit, N. (2017), Antitrust and Artificial Intelligence: A Research Agenda, in: Journal of European Competition Law & Practice, Vol. 8 (6), 361-362. Link.
- Samuelson, P. A., & Nordhaus, W. D. (2010). Chapter 2: "The Modern Mixed Economy". In Microeconomics (19de editie, pp. 26–30). McGraw-Hill/Irwin. Available on Canvas.
- Viscusi, W.K.; Moore, MJ. (1993), Product Liability, Research and Development, and Innovation, in: Journal of Political Economy, Vol. 101(1), 161–184. Link.

Module 2 (week 3 and first part of week 4) - Development, application and protection of computer software (Kees van Noortwijk)
Computer software plays a central role in digital technologies. This module will consider legal issues related to the development as well as the application of software. In particular, contractual issues and intellectual property rights are discussed. For the development of software different types of contracts can be used, which can result, for example, in standard software or customized software products. The application of software commonly requires maintenance and updates which equally takes place in a contractual setting. Intellectual property and licensing are tools for the protection of computer software and data. An important issue in intellectual property is the need to balance public goods and the monopoly of the rights holder. Questions that come up in this context are: why is protection of intellectual property, for example via a patent or a copyright, needed and is it effective? What is the role of open-source licenses in the development of software? How can the interests involved be balanced?

Reading materials:
Lecture 5 - Software development cycles; Standard vs. tailor-made; contracts for development, maintenance and application; Software as a Service

- Gurung, G., Shah, R., & Jaiswal, D. P. (2020). Software Development Life Cycle Models-A Comparative Study. *International Journal of Scientific Research in Computer Science, Engineering and Information Technology*, March, 30-37. Link.
- S. van der Hof, A.R. Lodder & G.J. Zwenne, Recht en computer (Recht en Praktijk, nr. ICT4), Hoofdstuk 4: ICT-contracten, Deventer: Kluwer 2014, p 65-92. Available as an e-book via UB-EUR.

Lecture 6 - Internet service providers; Legal protection of computer software; Copyright

- Niva Elkin-Koren, After Twenty Years: Copyright Liability of Online Intermediaries in: Susy Frankel & Daniel J Gervais, Eds., *Equilibrium of Copyright in the Digital Age*, 2014. Link.
- H. Struik, P.C. van Schelven & W.A.J. Hoorneman, *Softwarerecht. Bescherming en gebruik van computerprogrammatuur onder auteursrecht en octrooirecht* (Recht &Praktijk nr. ICT2), Hoofdstukken 2 (Programmatuur als object van bescherming), 4 (Makerschap) en 8 (Onderhoud van programmatuur), Deventer: Kluwer 2010, p. 23-66, 91-108 en 183-210. Available as an e-book via UB-EUR.
- Digital Services Act (Regulation EU 2022/2065), Link.
- Digital Markets Act (Regulation EU 2022/1925), Link.

Lecture 7 - Copyright (continued); Open source software licenses; Patent law; Protection of databases

- M. Ballhausen, "Free and Open Source Software Licenses Explained," in Computer, vol. 52, no. 6, pp. 82-86, June 2019, doi: 10.1109/MC.2019.2907766. Link.
- H. Struik, P.C. van Schelven & W.A.J. Hoorneman, *Softwarerecht. Bescherming en gebruik van computerprogrammatuur onder auteursrecht en octrooirecht* (Recht &Praktijk nr. ICT2), Hoofdstuk III.1-III.3 (Software als object van octrooibescherming), Deventer: Kluwer 2010, p. 353-357. Available as an e-book via UB-EUR.
- Pellegrini, F. (2006), Analysis of software patentability in Europe. Link.

Module 3 (Second part of week 4 and week 5-6) - Artificial Intelligence (Shu Li)

The third module uses AI as an example to highlight the principles of governance and regulation. Risks and harm are associated with the growing application of AI. The EU is currently taking action to adapt the liability framework and regulations to address the problems brought on by AI. In this module, first the current legal framework for product safety and liability will be reviewed. Then, the ideas for new legislation and legal proposals, such as AI Act, the 2024 Product Liability Directive and proposed AI Liability Directive and will be thoroughly introduced. Students are expected to apply the knowledge obtained in Module 1 to assess some of the most significant normative questions, such as: why do we need a risk-based approach to deal with the risk of AI? How should the liability be allocated among different actors along the supply chain?

Legal acts and reading materials:

Lecture 8 – From the regulation of product safety to the regulation of AI

Literature

- The 'Blue Guide' on the implementation of EU product rules, available here

Lecture 9&10 – EU AI Act

Legal acts

- AI Act, available here.

Literature

- Martin Ebers, 'Truly Risk-based Regulation of Artificial Intelligence How to Implement the EU's AI Act', in European Journal of Risk Regulation, 2024, available here.

Lecture 11 – The liability for AI and new technologies

Legal acts

- 2024 Product Liability Directive (PLD), available here
- The Commission Proposal for AI Liability Directive (AILD), available here.

Literature

- Duncan Fairgrieve, et al., 'Product Liability Directive' in Piotr Machnikowski (ed.), European Product Liability: An Analysis of the State of Art in the Era of New Technologies (Intersentia, 2016), pp.17-108. Freely accessed by EUR here.
- Gerhard Wagner, 'Next Generation EU Product Liability – For Digital and Other Products', in Journal of European Tort Law, 15(2), 2024, pp. 172 -224. Available here.

3.4 Case study (group assignment)

The case study assignments are posted on Canvas in the second week of the course. You will be assigned to a group and each group will be assigned a different case. All members of the group will receive the same grade.

3.5 Exam

The course will be concluded with an individual exam in week 7 of the course. Time and location of the exam will be published on Canvas.

The intermediate assignments and the individual exam must all be completed with a sufficient grade to pass the course. An insufficient grade for one part of the group assignment cannot be compensated with the other assignment or with the individual exam.

The final grade (including the grades scored for the group assignments) will be communicated at the end of the course. However, in case one of the intermediary group assignments is not completed with a sufficient grade, you will be notified of this as soon as possible.

4. Rubrics & grading

4.1 Written assignment (group assignment)

Grade	Criteria
4 (or lower)	Content is incomplete (regarding content/critical analyses/solutions/ideas), the paper contains serious errors, no or very little sources were found.
5	Content is somewhat incomplete regarding the main aspects of the case and/or has errors, almost no critical analyses/solutions or ideas, little sources were found and used.
6	Description is correct and complete regarding the main aspects of the case, some critical analyses/ideas concerning the material, some sources were found and used.
7	Description is correct and complete regarding the main aspects, decent critical analyses concerning the material, some ideas/solutions, sufficient sources were found and used.
8	Description is correct and complete, thorough critical analyses, contains solutions/ideas, substantial number of sources were found and used.
9	Description is correct and complete, thorough critical analyses, contains original or creative solutions/ideas, substantial number of sources were found and used.
10	Above and beyond on all assessment criteria: Description is correct and complete, thorough critical analyses, contains very original or creative solutions/ideas, substantial number of sources were found and used.

4.2 Presentation (group assignment)

Criteria	Assessment (score: low, medium, high)
Presentation is complete regarding the main aspects of the content and clear (easy to follow).	
Structure is logical.	
General presentation skills (for. ex. separate from the paper, contact/interaction with the audience, tone, pace, volume, etc.)	
Visual support (PPT or otherwise)	
Instigates the audience to think about the material	

4.3 Grading

The rubrics are a general outline for the grading process. Individual particularities of the assignments or performance that do not fit in this general outline are considered. For example: a written paper can have a very strong critical analysis, but a serious lack in sources. This does not match with a particular box in the rubric for the written assignment but will of course be reflected in the grade.

Grades for the group assignments (paper and presentation) will be communicated at the end of the course, in combination with the grade for the individual exam and the final grade.